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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,873	11/28/2000	Raymond C. Pang	X-805-7 US	8398

24309 7590 06/18/2004

XILINX, INC  
ATTN: LEGAL DEPARTMENT  
2100 LOGIC DR  
SAN JOSE, CA 95124

EXAMINER
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NGUYEN, MINH DIEU T

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 06/18/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/724,873

Applicant(s)

PANG ET AL

Examiner

Minh Dieu Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. Claims 1-8 are pending.

#### *Claim Objections*

2. Claim 6 is objected to because of the following informalities:

The word "ast" should be "at".

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Galovich, US 6,560,709 in view of Kim, US 6,246,768.

a) **As to claims 1-2 and 5-8**, Galovich discloses an apparatus and method for the secure transmission of credit card data over an Internet connection comprising an encryption circuit encrypts the scanned card data from card reader (Fig. 1, element

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14; col. 7 lines 10-11) which reads on an encryption key stored in a PLD comprising a plurality of key bits (col. 7, lines 59-67) for defining an encryption algorithm.

Galovich fails to disclose at least one bit for indicating whether more keys will follow.

Kim discloses a data encryption system (Fig. 1, element 100) for encrypting input plaintext data comprising a key scheduling device (Fig. 1, element 300). At the key scheduling device, 16 sets of round subkeys are used in encrypting the input plaintext data in each of 16 rounds, are derived by using the preset master key K (col. 2, lines 48-52). It implicitly discloses some indicator bits in the master key indicate whether more keys will follow, whether key is a first key which corresponds to first round, middle, last key which corresponds to the 16<sup>th</sup> round or only of a set of keys (claims 2 and 5-8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of bit indicating whether more keys will follow, as Kim teaches, in the system of Galovich so as to uniformly assign key values in order to increase the strength of ciphertext data (col. 1, lines 23-27).

b) **As to claims 3-4**, Galovich discloses the encryption key wherein the plurality of key bits comprises 56 bits and wherein the encryption algorithm comprises the DES algorithm (col. 7, lines 59-67).

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**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

a) US 6,118,869 to Kelem et al. discloses system and method for PLD bitstream encryption.

b) US 6,323,679 to Robertson et al. discloses flexible programmable logic module.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 703-305-9727. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Minh Dieu Nguyen  
Examiner  
Art Unit 2137

mdn  
6/2/04

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100